

Figure 1A

FIG. 1A is a block diagram of a system 100.

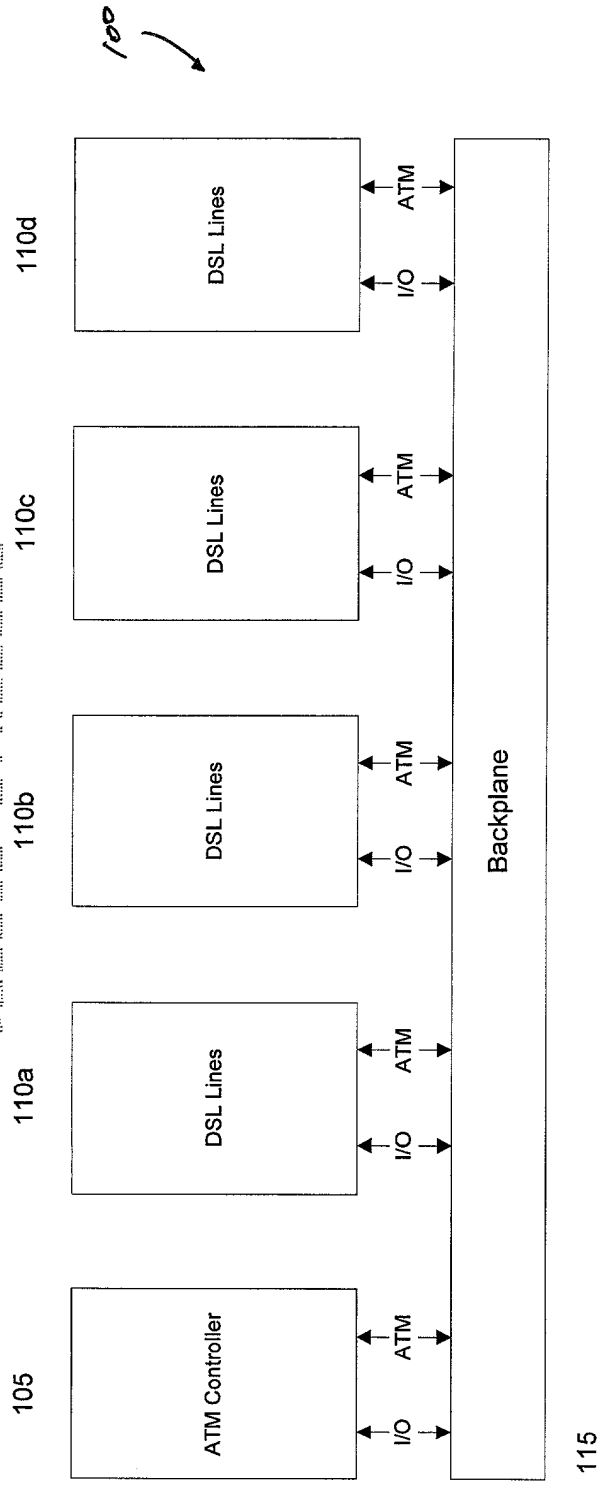
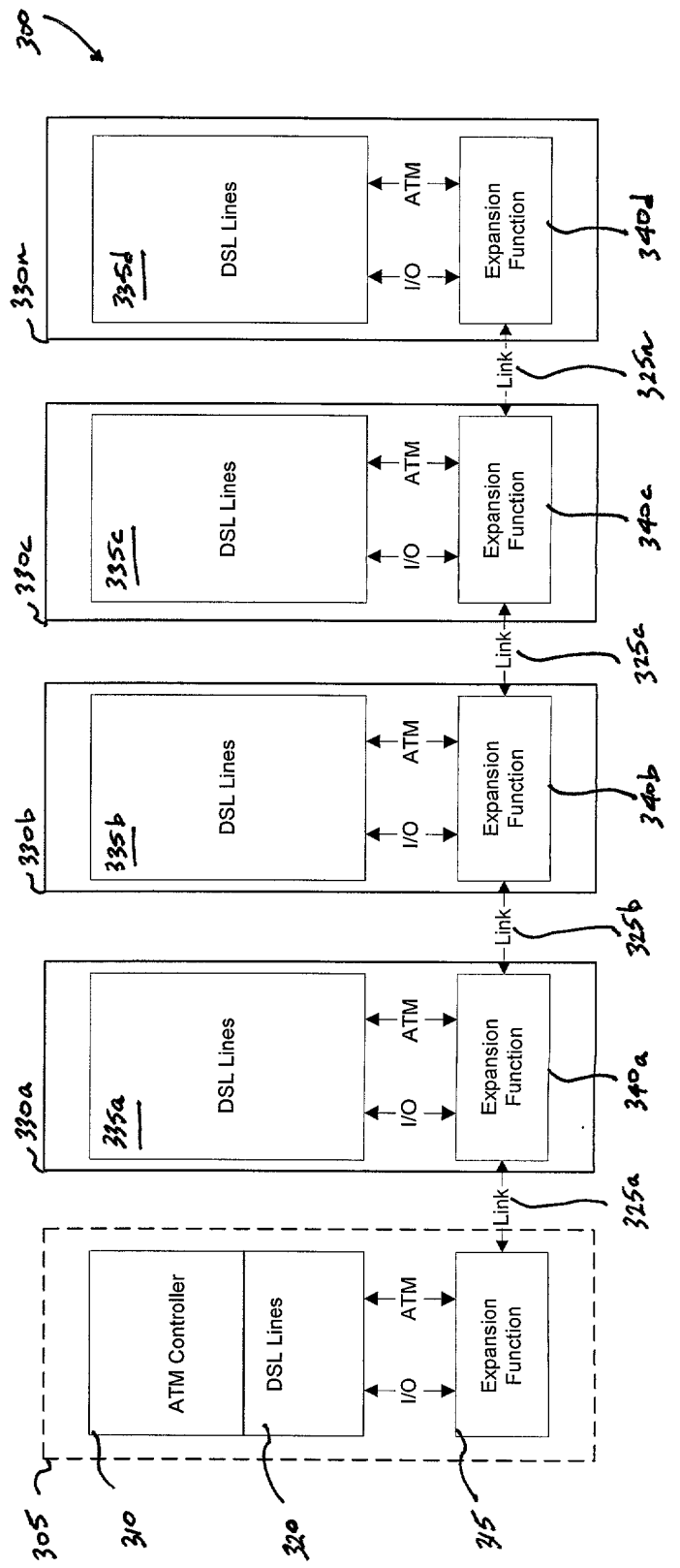


Figure 3



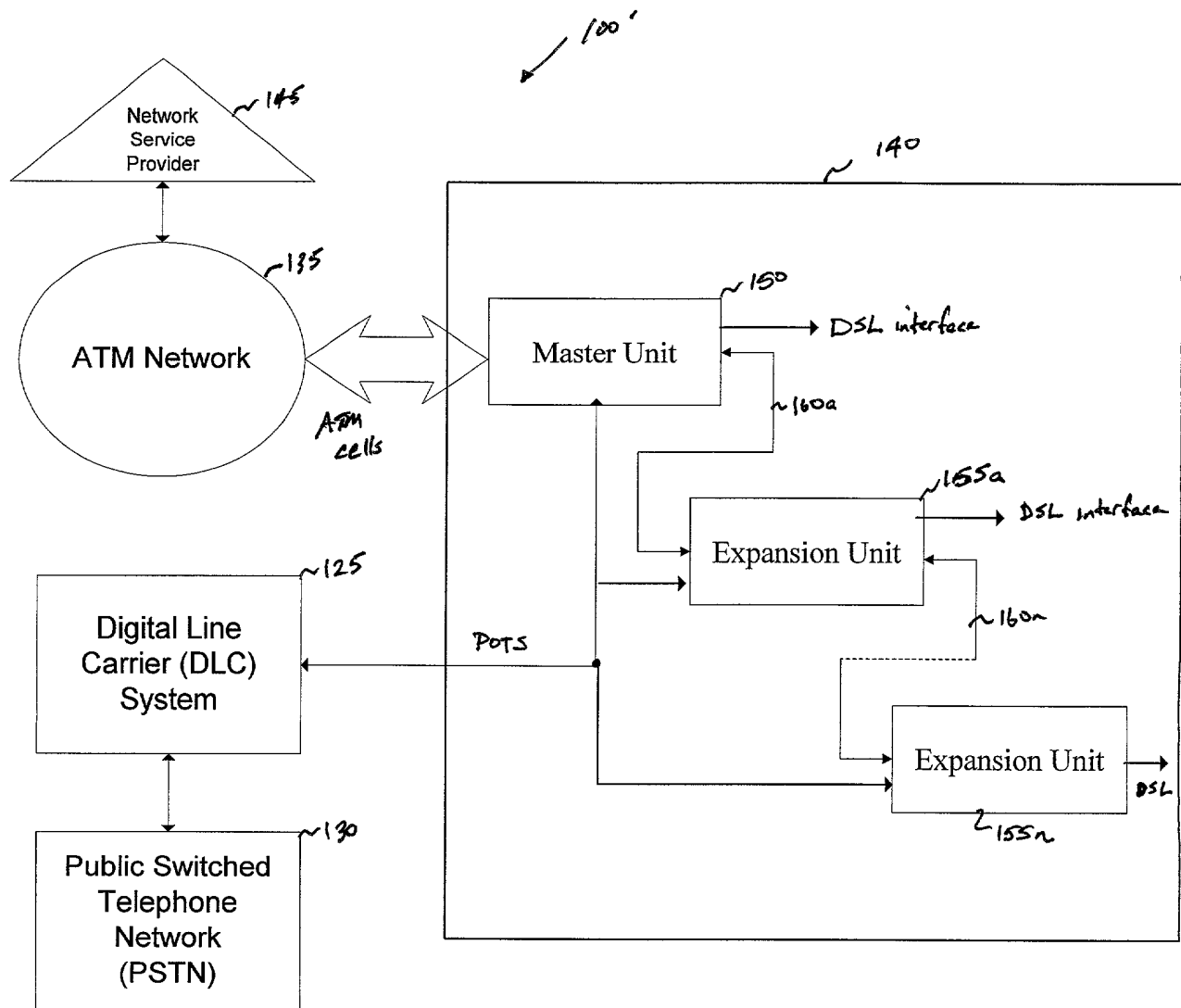


Figure 1B

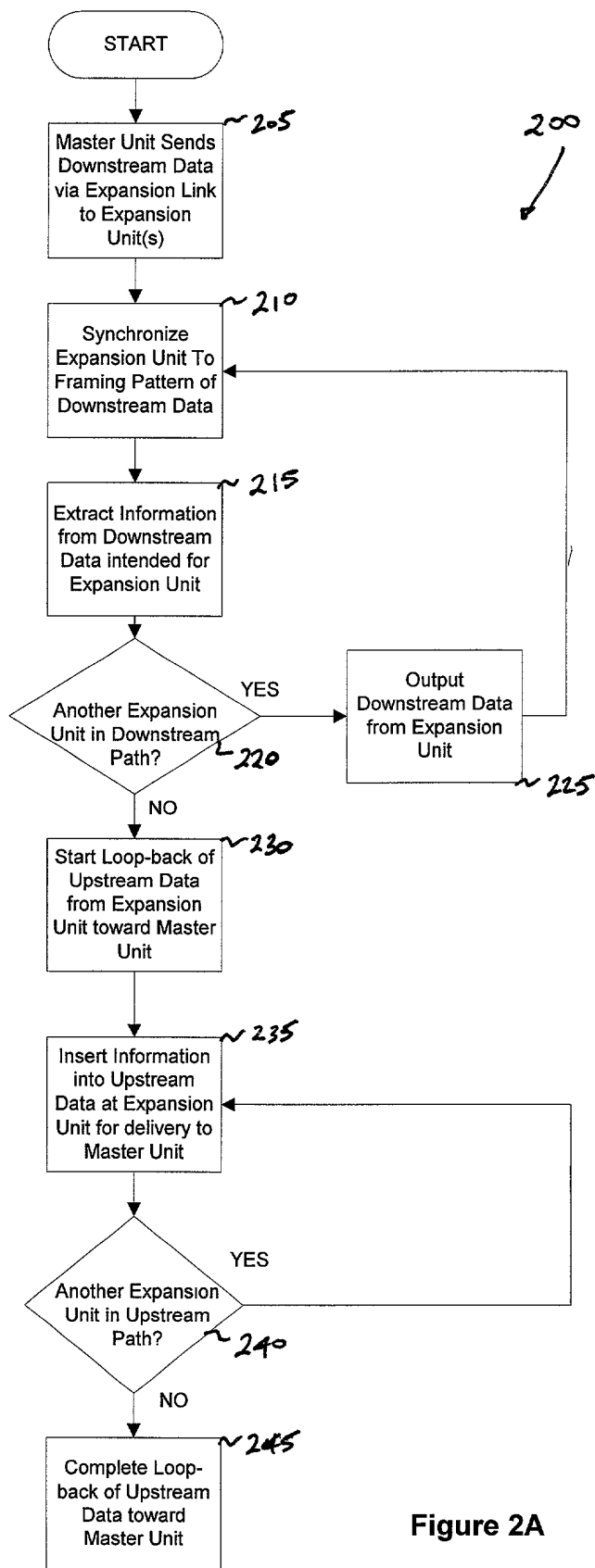
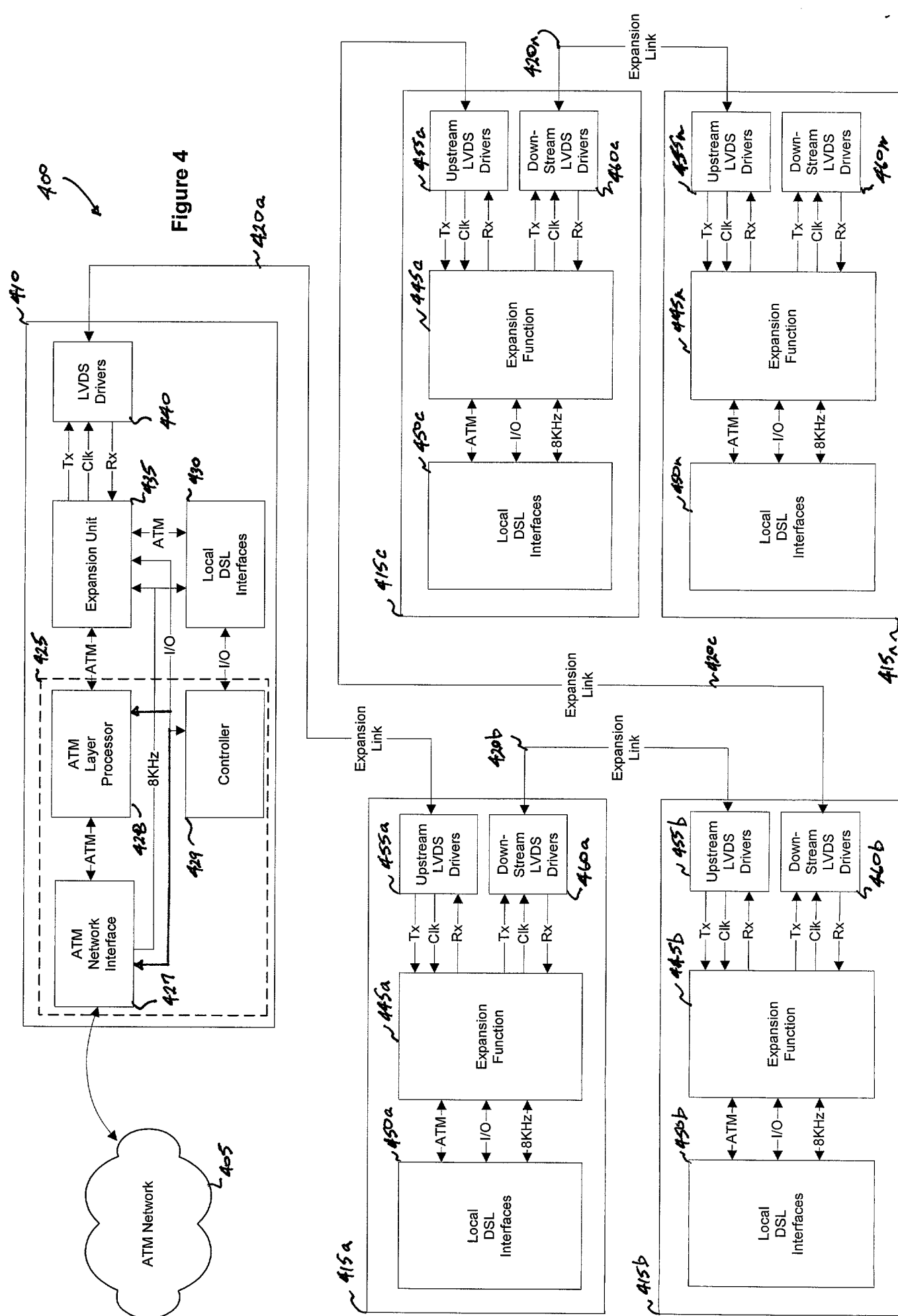


Figure 2A

The diagram illustrates the timing of data pulses relative to experiment clocks and a master clock. The signals are as follows:

- Master Clock:** A continuous periodic square wave.
- Pulse from Master:** A single pulse occurring at the first rising edge of the Master Clock.
- Clock at 1st exp:** A periodic square wave starting at the first rising edge of the Master Clock.
- Pulse arriving 1st exp:** A single pulse occurring at the first rising edge of the 1st experiment clock.
- Pulse leaving 1st exp downstream:** A single pulse occurring at the first falling edge of the 1st experiment clock.
- Clock at 2nd exp:** A periodic square wave starting at the first falling edge of the 1st experiment clock.
- Pulse arriving 2nd exp:** A single pulse occurring at the first rising edge of the 2nd experiment clock.
- Pulse leaving 2nd exp downstream:** A single pulse occurring at the first falling edge of the 2nd experiment clock.
- Clock at 3rd exp:** A periodic square wave starting at the first falling edge of the 2nd experiment clock.
- Pulse leaving 3rd exp downstream:** A single pulse occurring at the first falling edge of the 3rd experiment clock.
- Clock at 4th exp:** A periodic square wave starting at the first falling edge of the 3rd experiment clock.
- Pulse leaving 4th exp downstream:** A single pulse occurring at the first falling edge of the 4th experiment clock.
- Clock at 5th exp:** A periodic square wave starting at the first falling edge of the 4th experiment clock.
- Pulse leaving 5th exp downstream:** A single pulse occurring at the first falling edge of the 5th experiment clock.
- Clock at 6th exp:** A periodic square wave starting at the first falling edge of the 5th experiment clock.
- Pulse leaving 6th exp downstream:** A single pulse occurring at the first falling edge of the 6th experiment clock.
- Clock at 7th exp:** A periodic square wave starting at the first falling edge of the 6th experiment clock.
- Pulse leaving 7th exp upstream:** A single pulse occurring at the first rising edge of the 7th experiment clock.
- Pulse leaving 6th exp upstream:** A single pulse occurring at the first rising edge of the 6th experiment clock.
- Pulse leaving 5th exp upstream:** A single pulse occurring at the first rising edge of the 5th experiment clock.
- Pulse leaving 4th exp upstream:** A single pulse occurring at the first rising edge of the 4th experiment clock.
- Pulse leaving 3rd exp upstream:** A single pulse occurring at the first rising edge of the 3rd experiment clock.
- Pulse leaving 2nd exp upstream:** A single pulse occurring at the first rising edge of the 2nd experiment clock.
- Pulse leaving 1st exp upstream:** A single pulse occurring at the first rising edge of the 1st experiment clock.
- Pulse as sampled by Master Unit:** A single pulse occurring at the first rising edge of the Master Clock.

Figure 2B



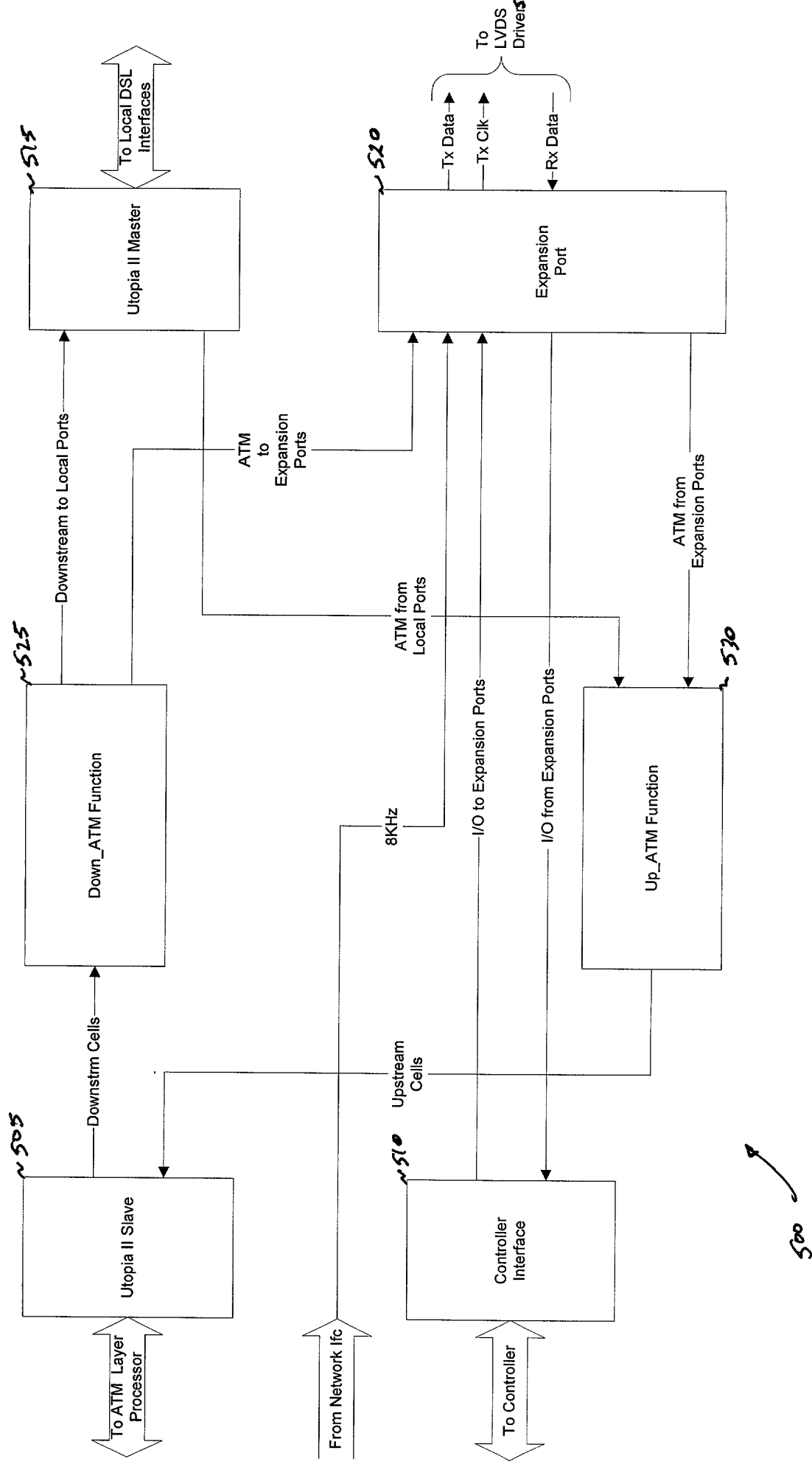


Figure 5